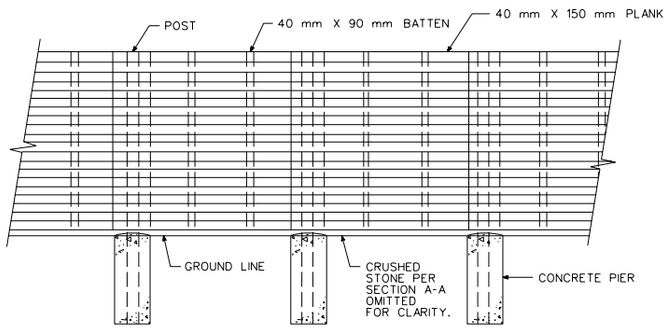
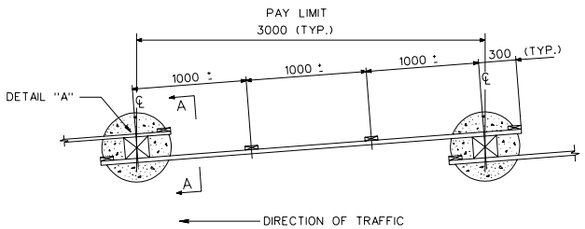
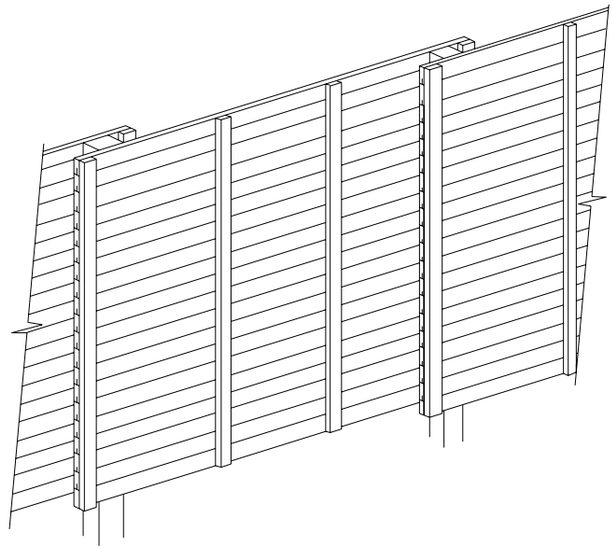
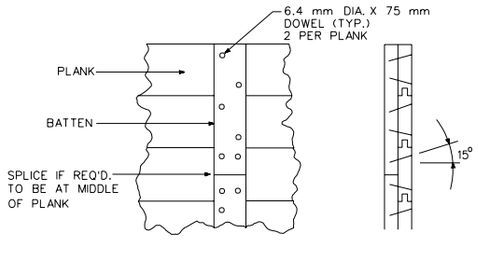


ELEVATION - TRAFFIC SIDE

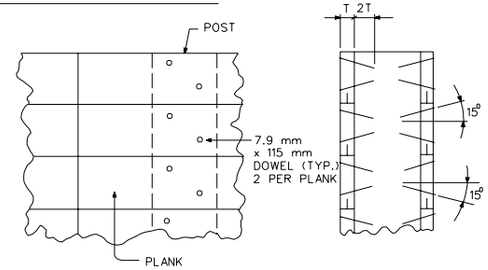




ISOMETRIC VIEW - SIDE AWAY FROM HIGHWAY

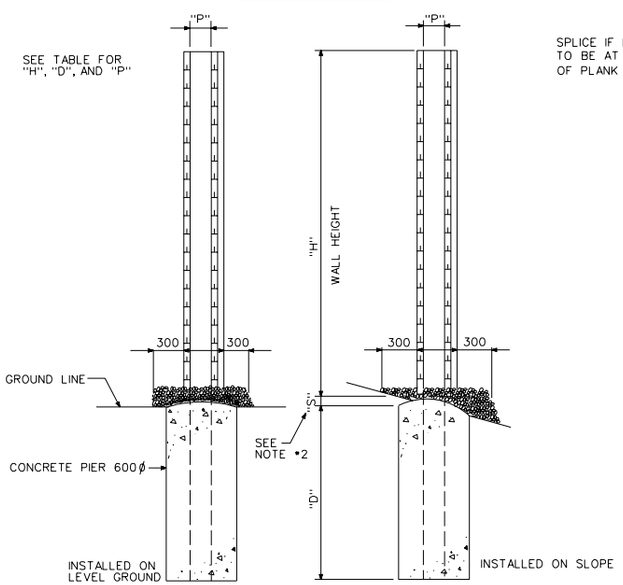


BATTEN FASTENING



DETAIL "A"

PLAN VIEW



SECTION A-A

TABLE: PIER AND POST DEPTH "D" IN mm (GRANULAR SOIL ONLY)

WALL HEIGHT "H" mm	POST DIMENSION "P" mm	PIER AND POST DEPTH "D"		
		CASE • 1 mm	CASE • 2 mm	CASE • 3 mm
1800	150	1200	1800	1800
2400	170	1500	1800	2100
3000	190	1500	2100	2400
3600	210	1800	2400	2700
4200	240	2100	2700	3000
4800	260	2100	3000	3000
5400	280	2400	3000	3300
6000	300	2400	3300	3600
6600	320	2700	3600	3600

CASE • 1: FLAT SURFACE WITH WATER TABLE BELOW BOTTOM OF HOLE.
CASE • 2: FLAT SURFACE WITH WATER TABLE ABOVE BOTTOM OF HOLE.
CASE • 3: SIDE SLOPE OF 1:2 WITH WATER TABLE BELOW BOTTOM OF HOLE.

GENERAL NOTES

1 : CONCRETE SHALL BE CLASS "A" IN CONFORMANCE WITH SECTION 6.01.

2 : CRUSHED STONE SHALL CONFORM TO ARTICLE M.01.01 AND BE PLACED TO A MINIMUM DEPTH OF 50 mm ABOVE THE BOTTOM OF THE PANELPLANKS AND SHALL BE CONTINUOUS. "S" SHALL BE A MINIMUM OF 50 mm.

3 : ALL POST HARDWOOD SHALL BE EKKI(LOPHIRA ALATA/PROCERA) ALL PANEL HARDWOOD MATERIAL SHALL BE BONALIM (DINIZIA EXCELSA) OR EKKWITH THE FOLLOWING MINIMUM CHARACTERISTICS.

	E K K I	BONALIM
BENDING	25.9 MPa	26.2 MPa
TENSION	23.8 MPa	24.1 MPa
COMPRESSION PARALLEL TO GRAIN	24.5 MPa	27.6 MPa
COMPRESSION PERPENDICULAR TO GRAIN	13.8 MPa	14.5 MPa
SHEAR PARALLEL TO GRAIN	2.9 MPa	3.1 MPa
MODULUS OF ELASTICITY	17 170 MPa	16 200 MPa
MAX. UNIT MASS ASSUMED FOR DESIGN PURPOSES	1120 kg/m^3	1090 kg/m^3

4 : THE HARDWOOD MATERIAL SUPPLIED SHALL BE NATURALLY FIRE RESISTANT WITHOUT THE USE OF FIRE RETARDANT PRESERVATIVES. TEST RESULTS, CALCULATED IN ACCORDANCE WITH ASTM E-84 FOR FLAME SPREAD AND SMOKE DEVELOPED SHALL NOT BE MORE THAN THE FOLLOWING:

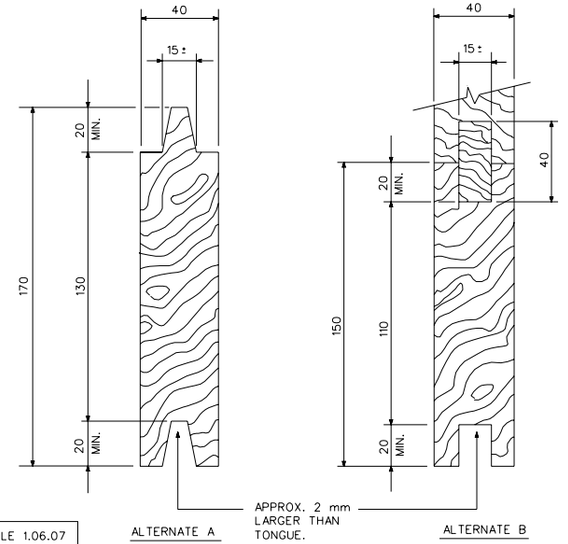
	E K K I	BONALIM
FLAME SPREAD INDEX (10 MINUTES) :	0	10
FLAME SPREAD INDEX (30 MINUTES) :	10	25
SMOKE DEVELOPED VALUE (10 MINUTES) :	5	10

5 : THE TOP OF EACH POST IS TO BE FIELD - CUT FLUSH WITH THE TOP OF THE PANEL PLANKS.

6 : THE TOP EDGE OF THE TOP PLANK OF EACH PANEL SHALL NOT HAVE A TONGUE OR GROOVE.
THE BOTTOM EDGE OF THE BOTTOM PLANK OF EACH PANEL MAY HAVE A GROOVE.

7 : ALL FASTENERS SHALL BE STAINLESS STEEL OR HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153. DOWEL STEEL SHALL CONFORM TO ASTM A36. ALL OTHER HARDWARE SHALL CONFORM TO ASTM A307DOWELS SHALL BE STAGGARD.

8 : THE FIRST POST IN THE DIRECTION OF TRAFFIC SHALL BE INSTALLED ON THE SIDE OF THE PANEL AWAY FROM TRAFFIC.



PLANK DETAILS

ALL DIMENSIONS ARE IN MILLIMETERS (mm) EXCEPT AS NOTED.

TEST CERTIFICATION REQUIRED -- REF. ARTICLE 1.06.07
MATERIAL CERTIFICATE
1. LUMBER & POSTS
2. HARDWARE
A CERTIFICATE OF COMPLIANCE IS ALSO REQUIRED ON THE ABOVE ITEMS

MANUAL REVISIONS TO THIS DOCUMENT ARE PROHIBITED. ALL REVISIONS MUST BE PERFORMED ON
Cadd File: QSA21(200,2001916C.DGN

CONNECTICUT DOT COMPUTER AIDED DESIGN OFFICE OF ENGINEERING

HARDWOOD NOISE BARRIER WALL TYPE 1

CONN. DEPT. OF TRANSPORTATION 8/95
CONN. DEPT. OF TRANSPORTATION 8/95

916-C